## REFERENCES

- [1] M. R. Cox, Cinderella: Three hundred and forty-five variants of Cinderella, Catskin, and Cap o'Rushes. No. 31, Folk-lore Society, 1893.
- [2] Tim Berners-Lee, "The WorldWideWeb browser." https://www.w3.org/People/Berners-Lee/WorldWideWeb.html, 1990.
- [3] A. Guha, C. Saftoiu, and S. Krishnamurthi, "The essence of javascript," in *ECOOP 2010 Object-Oriented Programming* (T. D'Hondt, ed.), (Berlin, Heidelberg), pp. 126–150, Springer Berlin Heidelberg, 2010.
- [4] M. Mulazzani, P. Reschl, M. Huber, M. Leithner, S. Schrittwieser, E. Weippl, and F. Wien, "Fast and reliable browser identification with javascript engine fingerprinting," in *Web 2.0 Workshop on Security and Privacy (W2SP)*, vol. 5, p. 4, Citeseer, 2013.
- [5] D. Yu, A. Chander, N. Islam, and I. Serikov, "Javascript instrumentation for browser security," in *Proceedings of the 34th Annual ACM SIGPLAN-SIGACT Symposium on Principles of Programming Languages*, POPL '07, (New York, NY, USA), p. 237–249, Association for Computing Machinery, 2007.
- [6] Y. Ko, T. Rezk, and M. Serrano, "Securejs compiler: Portable memory isolation in javascript," in *Proceedings of the 36th Annual ACM Symposium* on Applied Computing, SAC '21, (New York, NY, USA), p. 1265–1274, Association for Computing Machinery, 2021.
- [7] A. Haas, A. Rossberg, D. L. Schuff, D. L. Schuff, B. L. Titzer, M. Holman, D. Gohman, L. Wagner, A. Zakai, and J. F. Bastien, "Bringing the web up to speed with webassembly," *PLDI*, 2017.
- [8] WebAssembly Community Group, "WebAssembly Specification." https://webassembly.github.io/spec/core/syntax/index.html, 2017.
- [9] P. Mendki, "Evaluating webassembly enabled serverless approach for edge computing," in 2020 IEEE Cloud Summit, pp. 161–166, 2020.
- [10] M. Jacobsson and J. Wåhslén, "Virtual machine execution for wearables based on webassembly," in *EAI International Conference on Body Area Networks*, pp. 381–389, Springer, Cham, 2018.
- [11] Bytecode Alliance, "Bytecode Alliance." https://bytecodealliance.org/, 2019.

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[12] "Webassembly system interface." https://github.com/WebAssembly/WASI, 2021.

- [13] D. Bryant, "Webassembly outside the browser: A new foundation for pervasive computing," in *Proc. of ICWE 2020*, pp. 9–12, 2020.
- [14] B. Spies and M. Mock, "An evaluation of webassembly in non-web environments," in 2021 XLVII Latin American Computing Conference (CLEI), pp. 1–10, 2021.
- [15] E. Wen and G. Weber, "Wasmachine: Bring iot up to speed with a webassembly os," in 2020 IEEE International Conference on Pervasive Computing and Communications Workshops (PerCom Workshops), pp. 1–4, IEEE, 2020.
- [16] A. Grosskurth and M. W. Godfrey, "A reference architecture for web browsers," in 21st IEEE International Conference on Software Maintenance (ICSM'05), pp. 661–664, IEEE, 2005.
- [17] L. Garcés, S. Martínez-Fernández, L. Oliveira, P. Valle, C. Ayala, X. Franch, and E. Y. Nakagawa, "Three decades of software reference architectures: A systematic mapping study," *Journal of Systems and Software*, vol. 179, p. 111004, 2021.
- [18] G. Goth, "Addressing the monoculture," *IEEE Security & Privacy*, vol. 1, no. 06, pp. 8–10, 2003.
- [19] J. H. Lala and F. B. Schneider, "It monoculture security risks and defenses," *IEEE Security & Privacy*, vol. 7, no. 1, pp. 12–13, 2009.
- [20] J. Cabrera Arteaga, M. Monperrus, and B. Baudry, "Scalable comparison of javascript v8 bytecode traces," in *Proceedings of the 11th ACM SIGPLAN International Workshop on Virtual Machines and Intermediate Languages*, VMIL 2019, (New York, NY, USA), p. 22–31, Association for Computing Machinery, 2019.
- [21] D. Chen and W3C group, "WebAssembly documentation: Security." https://webassembly.org/docs/security/, 2020. Accessed: 18 June 2020.
- [22] S. Narayan, C. Disselkoen, D. Moghimi, S. Cauligi, E. Johnson, Z. Gang, A. Vahldiek-Oberwagner, R. Sahita, H. Shacham, D. Tullsen, et al., "Swivel: Hardening webassembly against spectre," in USENIX Security Symposium, 2021.
- [23] Q. Stiévenart, C. De Roover, and M. Ghafari, "Security risks of porting c programs to webassembly," in *Proceedings of the 37th ACM/SIGAPP* Symposium on Applied Computing, SAC '22, (New York, NY, USA), p. 1713–1722, Association for Computing Machinery, 2022.